DYNAMICS OF ATMOSPHERES AND OCEANS LABORATORY EXPERIMENTS IN PHYSICAL OCEANOGRAPHY SPECIAL ISSUE

| Part A | |
|--|-------|
| Contents | vii |
| Foreword | 1 |
| Research Papers | |
| Currents | |
| Laboratory simulation of the ocean currents in the Barents Sea | |
| T.A. McClimans and J.H. Nilsen Gyre formation at a corner by rotating barotropic coastal flows along a slope | 3 |
| B.A. Klinger Propagation of barotropic dipoles over topography in a rotating tank | 27 |
| R.C. Kloosterziel, G.F. Carnevale and D. Philippe | 65 |
| R.L. Pfeffer, R. Kung, W. Ding and GQ. Li | 101 |
| X. Zhang, D.L. Boyer, G.C. d'Hières, D. Aelbrecht and H. Didelle | 115 |
| Mixing in stratified fluids/internal waves | |
| An experimental investigation of vertical mixing in two-layer density-stratified shear flows | |
| G.D. Sullivan and E.J. List | 147 |
| Measurements of turbulence and fossil turbulence near Ampere seamount | |
| C.H. Gibson, V. Nabatov and R. Ozmidov | 175 |
| Two experimental studies of internal waves generated by tide-topography interaction | 205 |
| D.P. Renouard and JM. Baey | 205 |
| J.R. Taylor | 233 |
| S.T. Thoroddsen and C.W. van Atta | 259 |
| Experimental studies of the development of quasi-two-dimensional turbulence in stably stratified fluid | W. J. |
| C.T. Yap and C.W. van Atta | 289 |
| Simulation and stability of two-dimensional internal gravity waves in a stratified shear flow CL. Lin, J.H. Ferziger, J.R. Koseff and S.G. Monismith | 325 |
| Interaction of a negatively buoyant line plume with a density interface | |
| C.Y. Ching, H.J.S. Fernando and Y. Noh | 367 |
| Development of convection in a rotating fluid: scales and patterns of motion D. Brickman and D.E. Kelley | 389 |
| Part B: companion volume 20 (1-2) | |
| Tate D. Companion (Game as (1-a) | |
| Research Papers | |
| Ocean surface waves | |
| Spatial measurements of short wind waves using a scanning slope sensor P.A. Hwang, D.B. Trizna and J. Wu | 1 |
| Bubble size distribution under saltwater and freshwater breaking waves | 24 |
| J.W. Cartmill and M.Y. Su Ultra-wideband radar studies of steep crested waves with scanning laser measurements of wave slope profiles | 2 |
| D.B. Trizna, J.P. Hansen, P. Hwang and J. Wu A 2-D complex wavelet analysis of an unsteady wind-generated surface wave field | 33 |
| G.R. Spedding, F.K. Browand, N.E. Huang and S.R. Long | 155 |

| Instabilities/turbulence/shear layers | |
|--|----|
| Blocking and trapping of waves in an inhomogeneous flow | |
| S.R. Long, R.J. Lai, N.E. Huang, G.R. Spedding | 7 |
| The development of mushroom-like vortices from shear flow instabilities | |
| D. Etling, D. Hansen and R. Jürrens | 10 |
| Rayleigh-Taylor instability: experiments with image analysis | |
| S.B. Dalziel | 12 |
| Application of optical techniques to the study of plumes in stratified fluids | |
| A.J. Ferrier, D.R. Funk and P.J.W. Roberts | 15 |
| Stationary bottom generated velocity fluctuations in one-dimensional open channel flow | |
| B. de Jong | 18 |

